

REMARKS

Further and favorable reconsideration is respectfully requested in view of the foregoing amendments and following remarks.

Claim Amendments

Claim 25 has been amended to recite a multi-layer structure including an outer surface layer of hydrophobic resin selected from a specific group and an inner layer of the specific hydrophilic gas-barrier resin. Support for this amendment is found on page 10, lines 4-19 of Applicants' specification. Claim 39 has been cancelled, without prejudice. Accordingly, claims 40 and 41 have been amended to depend from claim 25.

No new matter has been added to the application by these amendments.

Patentability Arguments

The patentability of the present invention over the disclosures of the references relied upon by the Examiner in rejecting the claims will be apparent upon consideration of the following remarks.

Rejection Under 35 U.S.C. § 103(a) Based on Tanaka et al. in View of Shiiki et al.

And

Rejection Under 35 U.S.C. § 103(a) Based on Tanaka et al. in View of Ossian and Mitsubishi Gas Chemical Company

The rejection of claims 25-29, 31-33, 39, 41 and 42 under 35 U.S.C. § 103(a) as being unpatentable over Tanaka et al. in view of Shiiki et al.; as well as the rejection of claims 25, 39 and 40 under 35 U.S.C. § 103(a) as being unpatentable over Tanaka et al. in view of Ossian and Mitsubishi Gas Chemical Company are respectfully traversed.

The Examiner's Position Regarding the References

The Examiner takes the position that Tanaka et al. disclose a heat treating method for a packaging product, comprising providing a packaging product formed by enclosing a

content material within a packaging material, comprising at least a layer of hydrophilic gas-barrier resin such as polyamides. The Examiner states that Tanaka et al. further disclose that the package is retort heated in hot water, which has a water-soluble compound comprising an inorganic electrolyte added therein.

The Examiner admits that Tanaka et al. are silent in teaching a specific polyamide such as polymetaxylylene adipamide or ethylene vinyl alcohol or a glycolic acid co-polymer, as recited in claim 25.

The Examiner states that Shiiki et al. teach a gas barrier composite film comprised of a polymer of glycolic acid for use in food packaged materials. The Examiner takes the position that both references teach multilayer films that can withstand high temperature and high humidity conditions of processes such as retort, and that one would have been motivated to use the polyglycolic acid film as opposed to the polyamide film of Tanaka et al.

The Examiner also states that Ossian teach a multilayer film used for packaging, which is exposed to retort conditions, and that Mitsubishi Gas is relied on to teach that MXD6 has been well known to be capable of handling retort-type temperatures. The Examiner states that one would use MXD6 for the outer layer of Tanaka et al. in view of the references.

Applicants' Arguments

As discussed above, claim 25 has been amended to recite a multi-layer structure including an outer surface layer of hydrophobic resin selected from a specific group and an inner layer of the specific hydrophilic gas-barrier resin.

According to the recited multilayer structure, the present invention prevents opalescence of a packaging material having a multi-layer structure including an outer surface layer of at least one hydrophobic resin selected from a specific group and an inner layer of hydrophilic gas-barrier resin selected from the group consisting of ethylene vinyl alcohol copolymer, polymetaxylylene adipamide and glycolic acid (co-)polymer during hot water treatment thereof. This is accomplished by causing the hot water to contain an inorganic electrolyte (such as sodium chloride) as a water-soluble compound, to suppress the penetration of water through the outer surface layer of hydrophobic resin and absorption of

the water with the inner layer of the hydrophilic gas-barrier resin leading to opalescence of the packaging material.

Tanaka et al. disclose, as a second embodiment, a retort method characterized by treating a container for retort packaging comprising a laminated film containing ester bonds between poly(meth)acrylic acid (A) and a polyalcoholic polymer (B) in water containing a metal (C). The treatment is performed for forming a new ionic crosslinked structure. (Please see column 3, lines 21-25 and 41-51.) More specifically, the ions of the metal (C) permeate into the film to form ionic cross-linking with free carboxylic acids originating from poly(meth)acrylic acid. (Please see column 11, lines 40-54 and column 4, chemical structure (X).)

For the above purpose, Tanaka et al. essentially require a container for retort packaging composed of at least two layers of laminated film comprising an outermost layer having a specific function (i.e., an outer surface layer containing ester bonds between poly(meth)acrylic acid (A) and a polyalcoholic polymer (B)) and layers comprising a thermoplastic resin such as polyamide, as described at column 8, lines 23-26. This is quite contradictory to the recited packaging material which requires an outer surface layer of at least one hydrophobic resin selected from a specific group as discussed above.

Accordingly, the replacement of the additional layer of a thermoplastic resin of Tanaka et al. with a layer of hydrophilic gas-barrier resin as taught by the secondary references of Shiiki et al., Ossian or Mitsubishi Gas Chemical Company, as suggested by the Examiner, does not result in Applicants' recited packaging material of the specific multi-layer structure. Therefore, Applicants' claimed methods are not rendered obvious by the recited combinations of references.

For these reasons, the invention of claims 25-29, 31-33, and 40-42 are clearly patentable over the cited combinations of references.

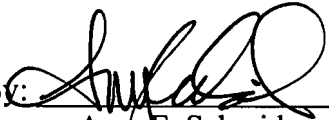
Conclusion

Therefore, in view of the foregoing amendments and remarks, it is submitted that each of the grounds of rejection set forth by the Examiner has been overcome, and that the application is in condition for allowance. Such allowance is solicited.

If, after reviewing this Amendment, the Examiner feels there are any issues remaining which must be resolved before the application can be passed to issue, the Examiner is respectfully requested to contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

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